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Joseph W. Howe, D.C., D.A.C.B.R. and the Development of Modern Chiropractic Radiology

KENNETH J. YOUNG, D.A.C.B.R, D.C.*

Born in Galeton, Pennsylvania, on 27 May 1930, Joseph W. Howe has been extremely influential raising the educational standards for radiology in chiropractic. After receiving his D.C. from Palmer in 1952, he worked in private practice in Pennsylvania until being drafted into the Army, where he worked as a radiologic technician. After returning to civilian life and his practice, he attended many seminars and lectures on the subject, including one in 1958, taught by Roland Kissinger, D.C. at the National College of Chiropractic (NCC), the first postgraduate course in chiropractic roentgenology ever administered by a college. Howe then took and passed the second exam given by the American Board of Chiropractic Roentgenologists and was awarded certificate number eight in 1959. He helped to form the American Chiropractic College of Radiology and became its first Radiological Health Consultant. In 1968, he joined the Associates Diagnostic and Research Center (ADRC) in Tallmadge, Ohio, where he was able to concentrate on research and establish an off-campus facility for radiology residents of NCC. During this time Howe also lent his expertise to the Houston Conference on Spinal Manipulation. However, financial difficulties with the Center led Howe to leave, and accept a full time position teaching at NCC. Howe ultimately found himself too involved with administrative duties and not enough with the radiology that he loved, so he moved his family across the country in order to accept the radiology department chair at Los Angeles College of Chiropractic (LACC) in 1978. There he was given freedom to build the department to his high standards, and it retains the strongest residency in the profession, with up to six residents at any one time and links to prestigious radiologists like Donald Resnick, M.D. and Steve Rothman, M.D. Officially, Howe retired in 1998, but he still occasionally teaches residents and the Westwood-based radiology practice that he donated to LACC continues, run by the radiology faculty.

Joseph W. Howe, D.C., D.A.C.B.R.
Practice Limited to Diagnostic Imaging
Westwood Medical Plaza
10921 Wilshire Blvd. #1212
Los Angeles, CA 90024

March 2, 1998

to: Client Doctors
re: Retirement and transfer of practice

This is to inform you that as of March 1, 1998 I have retired from practice.

It is with great pleasure that I turn the practice over to the Diplomate Faculty members of the Radiology Department of the Los Angeles College of Chiropractic. The practice will continue to operate from the office in the Westwood Medical Plaza in West Los Angeles. Residents and DACBRs from the Faculty will be in the office to do the radiography and consult with referring doctors. These are people whom I have trained or in whose training I have had significant input; therefore, I am delighted that the practice will continue with the quality I have instituted.

To assure smooth transition of the practice I will be in the Westwood office

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*Resident in Diagnostic Imaging; Los Angeles College of Chiropractic; 16200 Amber Valley Dr.; Whittier, CA.
Address Correspondence to Kenneth Young, D.A.C.B.R., D.C.; 851 N. Walnut St., Apt. 15, La Habra, CA 90631; E-mail address: kjydc@earthlink.net

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Figure 1.
Joseph William Howe in 1970. (The ACA Journal of Chiropractic, *7(3):26).*

each Monday in March and on the first and third Wednesdays familiarizing those who will be in the office as to the radiography equipment and other aspects of operating the office.

It has been a pleasure working with you. I wish you well in your practice and recommend the LACC group to you without reservation.

Fraternally,

Joseph W. Howe, D.C., D.A.C.B.R. (1).

Some would say the end of an era. Of course, it is not really the end. Howe will continue to teach on a part-time basis at Los Angeles College of Chiropractic (LACC). But it will be fully on his own terms; he will finally be able to spend as much time as he would like with his wife Dee, their children, and an ever-growing gaggle of grandchildren. To accomplish this latter task, Howe has purchased a gigantic pickup truck to tow a forty-foot mobile home around the country so that he can stay for extended periods with his kids and their families. What better way to cap a lifetime of achievement than with the ability to designate time for activities exactly as one chooses? Would this not be a goal any person would strive to attain? Howe has worked extremely hard to reach this coveted position, though. He has spent thousands of hours over a forty-six-year period in study, research, teaching, and clinical as well as radiological practice. (Figure 1)

How very far away the West Side of Los Angeles,

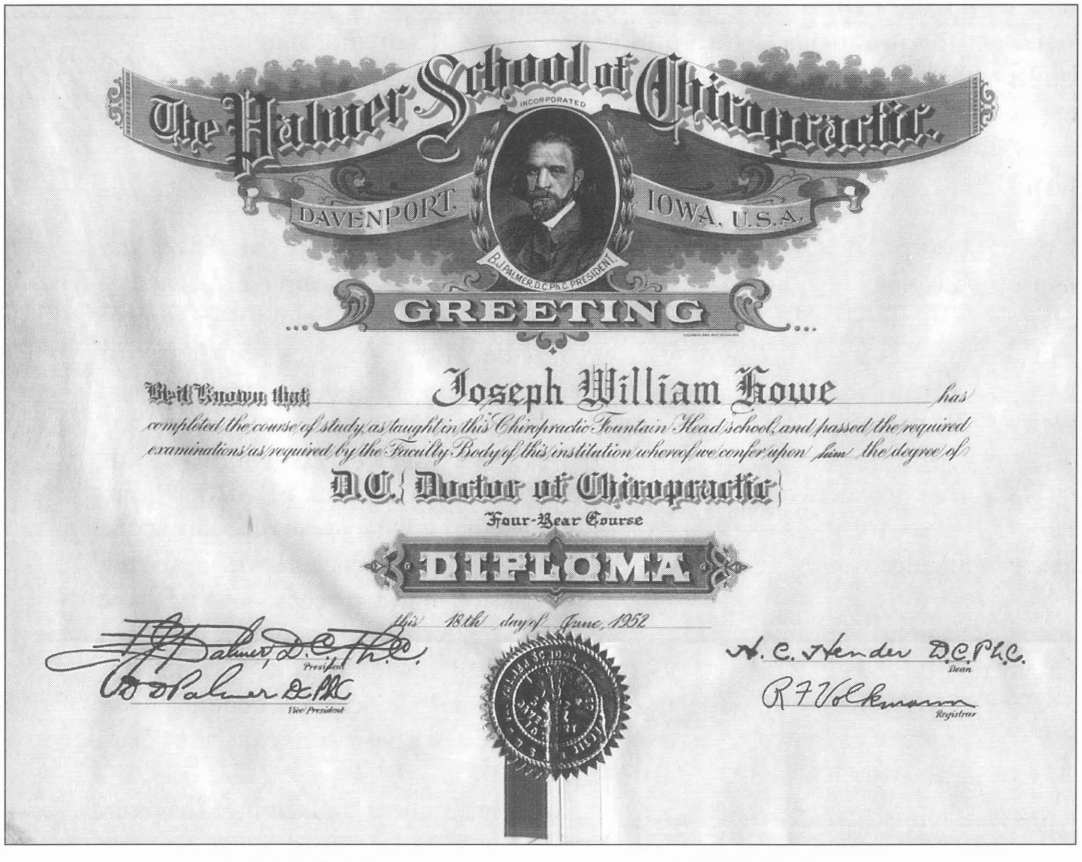
The Palmer School of Chiropractic
INCORPORATED
DAVENPORT IOWA, U.S.A.
D.D. PALMER D.C. PH.C. PRESIDENT
GREETING
Be it Known that Joseph William Howe has
completed the course of study as taught in this Chiropractic Fountain Head school, and passed the required
examinations as required by the Faculty Body of this institution whereof we confer upon him the degree of
D.C. Doctor of Chiropractic
Four-Year Course
DIPLOMA
this 18th day of June, 1952
Vice President
Dean
Registrar

Figure 2.
Diploma from Palmer School of Chiropractic (Courtesy Joseph W. Howe).

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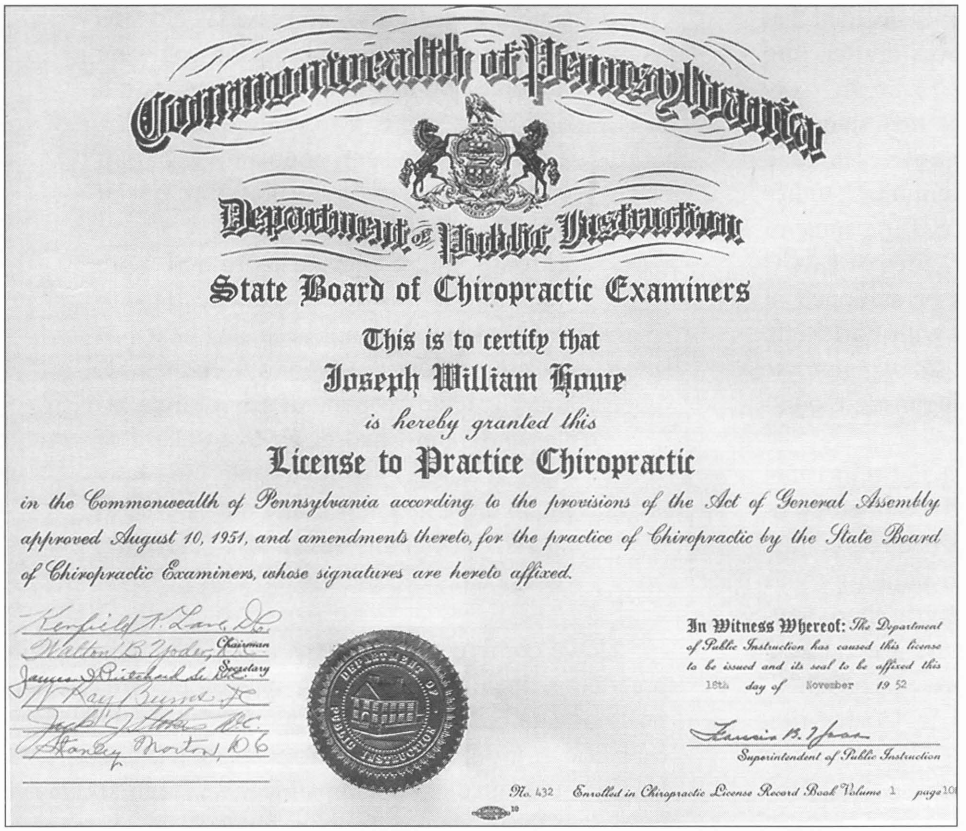
home of the University of California Los Angeles (UCLA), the J. Paul Getty Center and Museum, and many television and film stars is from his home town of Galeton, Pennsylvania. Joseph William Howe was born on 27 May 1930 to Lawrence E. and Mabel J. Howe, who were chiropractors themselves (2). They both attended Universal College of Chiropractic in Davenport, Iowa. "In those days, a group would come from Palmer and a group from Universal to the station whenever a train was coming in and fight it out. Whoever won would carry off the new recruits. That's how my mother ended up at Universal; I'm not sure how my father ended up there"(3). Lawrence graduated in 1914, and Mabel in 1915. They started a family and a practice in New Cumberland, Pennsylvania and worked there until their retirement in 1956 (4).

Howe was graduated from New Cumberland High School with honors in 1948 and his pre-chiropractic education was completed at Pennsylvania State University which he attended from 1948 to 1950, and Elizabethtown College, where he took courses in 1950. He then traveled to Davenport to attend chiropractic college. On the advice of his father, he chose the Palmer School, and the "two-year" (one year real-time) program. However, this was insufficient education for licensure in Pennsylvania, where he was planning to practice with his parents, so he opted to stay on for another "year" (six months in reality). "It was just a repeat of the previous six months; I really didn't learn anything new" (5) His graduation date was 18 June 1952. (Figure 2)

At this point, Howe contacted the department of the army and offered himself as a recruit. Not yet having started in practice and being unmarried, he sensibly figured that this would be the most opportune time to get any possible military obligations completed. The army turned him down, stating that his services were not needed. Howe mentally shrugged and began to build a life. At that time, the board of chiropractic examiners was just being organized in Pennsylvania. His father was licensed as a drugless physician under the state medical board, and his mother was unlicensed. Howe remembers that when he was growing up, the living room of their house was also the office's waiting room; and whenever a patient that was unknown to them would come in, they would sit down in that room and talk for a while, to try to find out if the "patient" had really been sent by the police to arrest them for practicing medicine without a license (6).

The first exam given under the new chiropractic licensing board was in August 1952; Howe took and passed that exam, as did his mother. (Figure 3)



Commonwealth of Pennsylvania

Department of Public Instruction

State Board of Chiropractic Examiners

This is to certify that

Joseph William Howe

is hereby granted this

License to Practice Chiropractic

in the Commonwealth of Pennsylvania according to the provisions of the Act of General Assembly approved August 10, 1951, and amendments thereto, for the practice of Chiropractic by the State Board of Chiropractic Examiners, whose signatures are hereto affixed.

Kenfield A. Lane, M.D. Chairman
Walton B. Yoder Secretary
James D. Pritchard, M.D.
W. Kay Burrell, D.C.
Joseph J. Hoke, M.D.
Stanley Morton, D.C.

In Witness Whereof: The Department of Public Instruction has caused this license to be issued and its seal to be affixed this 18th day of November 19 52

Francis B. Haas
Superintendent of Public Instruction

No. 432 Enrolled in Chiropractic License Record Book Volume 1 page 10

Figure 3.
License to practice chiropractic in Pennsylvania (Courtesy Joseph W. Howe).

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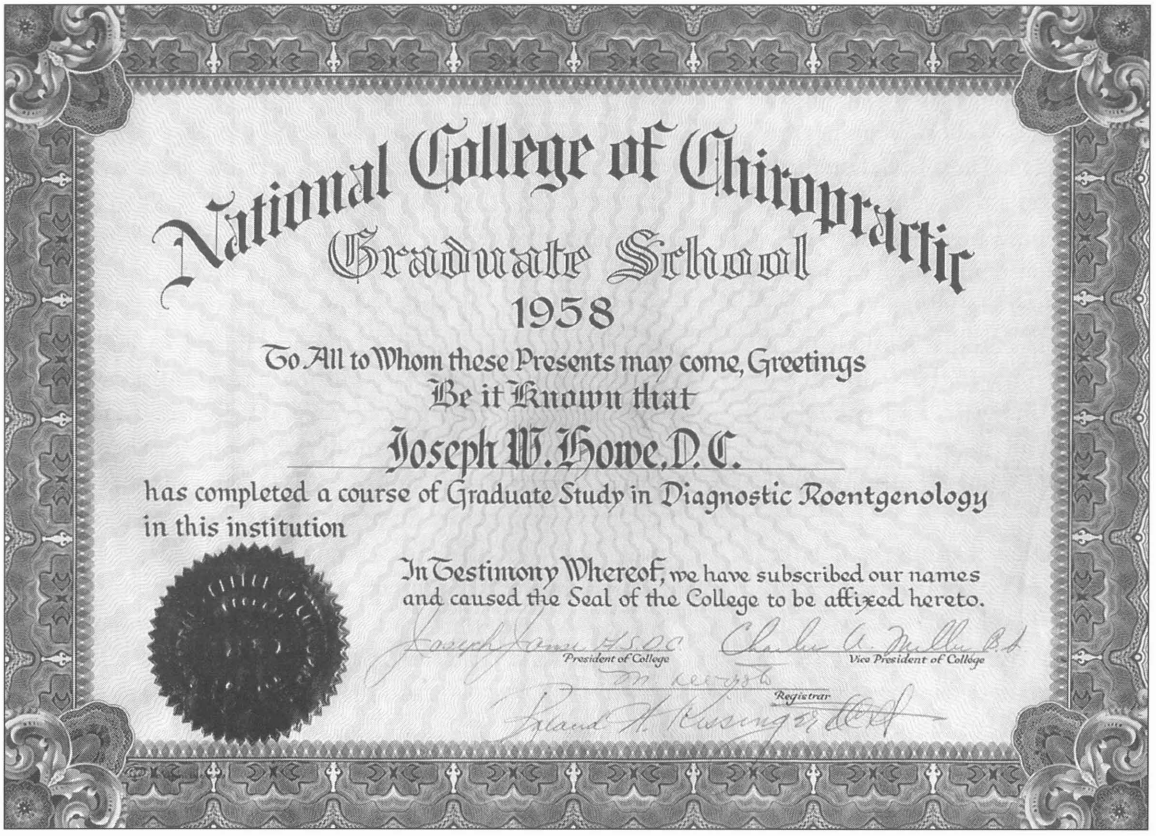
National College of Chiropractic
Graduate School
1958
To All to Whom these Presents may come, Greetings
Be it Known that
Joseph W. Howe, D.C.
has completed a course of Graduate Study in Diagnostic Roentgenology
in this institution
In Testimony Whereof, we have subscribed our names
and caused the Seal of the College to be affixed hereto.
President of College
Vice President of College
Registrar

Figure 4.
Certificate from the postgraduate course in roentgenology from National College (Courtesy Joseph W. Howe).

On 9 May 1953, Howe married Mary Dolores "Dee" Rathfon. With a new wife and a budding practice, of course it was in 1954 that the army suddenly decided that his services were needed after all. He was drafted into the Army Medical Corps for two years to be an x-ray technician (17). This was the experience that helped to stimulate his lifelong interest in radiology. He took dozens of x-rays every day, including contrast studies and fluoroscopy and hand developed every film, some of which can be still found in the pathology files of LACC and NCC. He was fortunate enough to be stationed in Indiana, which brought him into contact with Earl Rich, D.C., author of *Rich's Atlas of Clinical Roentgenology*, further fueling his curiosity about this diagnostic modality (8).

After being released from Uncle Sam's grip in 1956, Howe returned to New Cumberland and assumed command of the practice there, for his parents had retired that same year. Howe's formal education in radiology was minimal: "My training in x-ray was pretty limited, having come from Palmer" (9) but he learned a great deal from a chiropractor with whom his parents consulted, Michael Giammarino, D.C., who lived in Coatesville, Pennsylvania, about a hundred miles away. Giammarino had a reputation in that part of the country as a skilled radiographer and radiologist:

> He had x-ray equipment beyond that [which] most chiropractors had at that time... I was quite impressed... He was the resource; he was the person you went to when you had questions about radiology. There were M.D. radiologists in the area who were semi-cooperative, but, of course, you could get a lot more out of Mike.
>
> Through that I became more and more interested in x-ray... He introduced me to things that I had not seen nor heard of before, like... spondylolisthesis... frankly, I had been out of school for a little while and I had never even heard of such a thing... It interested me, how much more he knew than I did. I used to spend time going down to Coatesville, on my days off and his days off (10).

Howe continued learning as much as possible while practicing, including attending one of the first formal postgraduate courses in radiology offered through a chiropractic institution. In 1958, Roland Kissinger, D.C. taught this course at NCC in Chicago. It ran six days a week for three weeks, from 6 January to 25 January,

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THE NATIONAL BOARD
OF
CERTIFIED CHIROPRACTIC ROENTGENOLOGISTS

Be it known that

Joseph W. Howe, D.C.

is a

CERTIFIED ROENTGENOLOGIST

having pursued an accredited course of graduate study in roentgenology and clinical work, met all the qualifications, and passed the examination under the authority of the National Council of Chiropractic Roentgenologists, an affiliate of the National Chiropractic Association.

We hereby affix the seal and the signatures of this Board, this 15th day of May nineteen hundred and fifty-nine.

President

Secretary

Subject to yearly renewal and membership in National Council of Chiropractic Roentgenologists and National Chiropractic Association membership

Figure 5.
Diplomate certificate from the National Board of Certified Chiropractic Roentgenologist (Courtesy Joseph W. Howe).

seven hours each day, for a total of 126 hours, and included a tour of an x-ray film manufacturing plant. It was a comprehensive program. Practical aspects were emphasized with view-box sessions, slides, a Vu-Graph unit, Sante's miniatures; and the cases were supplemented with clinical information. In addition to strict radiology, related anatomical, physiological and pathological correlation was made. The course was the first approved by the Accrediting Board of the National Council of Chiropractic Roentgenologists (NCCR) of the National Chiropractic Association (NCA) (11). (Figure 4)

On 22 March and 23 March 1958, the first examination for certification in chiropractic radiology was given in Omaha, Nebraska, by the newly formed Board of Chiropractic Roentgenologists, part of the NCCR. Howe applied to take it, but was turned down by the board. At this time, one of the requirements to be eligible to take the exam was having had a minimum of five years in practice.

> They wouldn't let me sit the first exam offered, because they would not count my time in the army. Two years in the army, where I probably saw and performed more radiographic things than at any time in my career, but that wouldn't count toward practice, so I had to wait. I had only practiced two years before I went into the army; I came out in '56, so I had to wait until '59 (12).

Howe passed the exam, once he was finally able to take it, and became one of the first twenty-five D.C.s to receive this specialty certification. However, the first few batches of certificates were not numbered initially. In 1972, all certificates were retrospectively numbered, (13), starting with the first five members of the board (Leo Wunsch, Michael Giammarino, Duane Smith, Fred Baier, and Waldo Poehner), then alphabetically for all the examinees up to 1959. This resulted in Howe's receiving certificate number eight, although he was actually the thirteenth person to pass the exam (14). (Figure 5)

Shortly after Howe received his Diplomate, Joe Janse, D.C., then president of NCC, in 1960, asked Howe to take over the postgraduate teaching schedule, after the death of Roland Kissinger (15). He accepted, marking the initiation of a long and successful teaching career.

Through the mid-1960s, Howe worked in clinical practice in New Cumberland during the week and taught seminars on the weekends for Lincoln College of Chiropractic, NCC, and many others all over the country (16).

At this time, Howe was also influential in forming the academic arm of the chiropractic radiology community, the American College of Chiropractic Roentgenologists (ACCR). According to Hariman (1977):

> As the number of diplomates increased, the need for professional communication was felt. Earl Rich, Joseph Janse and

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> others convened an informal meeting in Chicago in the early 1960s, and they agreed to meet annually for stimulation and discussion. Leadership devolved to two board members, Douglas Ray and Joseph Howe, who were instrumental in the formation and organization of the American Chiropractic College of Roentgenologists. This group is now able to speak for the diplomates at professional meetings and is representative of the highest aspirations of the specialty (17).

In early 1968, the position of radiological health consultant of the ACCR was created, and Howe was the first to fill the post. There he continued the work on radiation safety that he had begun ten years earlier, as liaison to the National Center for Radiological Health, a division of the United States Public Health Service ([18], [19]).

Howe continued in this manner, practicing, consulting as a radiologist, and lecturing in postgraduate seminars in radiology until later in 1968, when he was offered an opportunity to concentrate on radiology, combining film reading with teaching as well as research in a specialty practice.

> I was teaching a class in Columbus, Ohio, and I was also spending a lot of time at Lincoln [Chiropractic College], because [Earl] Rich was into the cineradiographic stuff, and I would go out there to teach for the weekend. I'd go out Thursday, and spend all day Friday working with him, teach the class Saturday and Sunday and go home. And I was really fascinated with what we were seeing on the cineradiography...
> I got a call one night. I had just come home from the gym; I was practicing karate at the time, actually teaching karate at the time. About eleven o'clock at night I came home and I got a telephone call from Dave Snyder in Ohio. He asked me, you know, I had been talking so much about what I thought the potential for cineradiography was. And he said, "How would you like a cine machine? Which model would you like? Would you like it enough to give up your practice there and come out to Ohio? We've been talking about building a diagnostic and research center, and we'd like you to head it." I said, "I've got a good practice here, I'm pretty well established. Let me think it over. Give me five minutes." ...I went out to Akron a couple of times to talk to them, found somebody to take my practice, and moved out to Ohio (20).

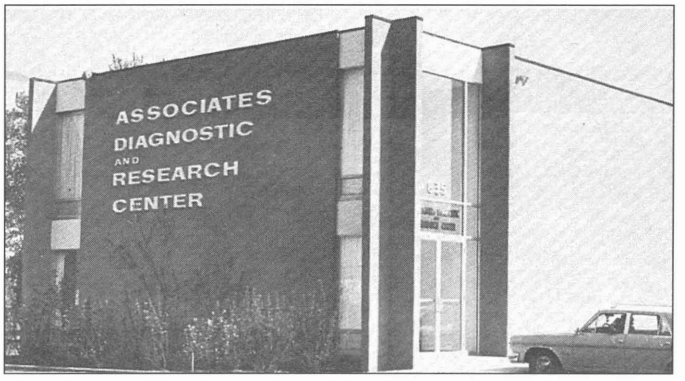

Figure 6: The exterior of the Associates Diagnostic and Research Center, Tallmadge, OH (The ACA Journal of Chiropractic, 7(3):10).

Thus the Associates Diagnostic and Research Center (ADRC) was created in Tallmadge, Ohio, by Dave Snyder, D.C. and five other chiropractors, with Howe running the cineradiography (fluoroscopy) portion (21). (Figure 6). They obtained state-of-the-art equipment and housed it in a temporary building until a permanent facility was constructed. This marked the beginning of Howe's transition from clinical to radiological practice with research.

Indeed, Howe performed a great deal of research at the new facility, emphasizing that, "Research in the area of spinal function and mechanics is not merely important, it is vital to the survival and progress of chiropractic if it is to become scientifically valid and acceptable." In the first two years of operation, biomechanical observations on more than a hundred patients were made, relating to several research projects (22). A summary of some of the findings from 121 cineroentgenological (fluoroscopic) studies of the cervical spine was published in the *Journal of Clinical Chiropractic* (23).

In 1969, Joe Janse and Howe augmented the role of the ADRC by establishing it as an off-campus facility for radiology residents at NCC. The first full-time residents were Michael T. Buehler, D.C., from NCC, who started in 1969, and John Danz, D.C., from Logan Chiropractic College, who started in 1970 ([24], [25]).

This was a bold advance in the education of chiropractic radiologists and earned Howe recognition in the

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profession. James Winterstein, D.C., president of NCC said: "Dr. Joseph Howe is, in my estimation, one of the primary contributors to the development of, and continuation of, the residency program in radiology for the chiropractic profession" (26).

While there, Howe continued his own education in order to become the best radiologist and teacher that he could, as he would throughout his entire career. He took courses at the University of Akron and a course in medical x-ray protection from the National Center for Radiological Health, part of the United States Public Health Service.

This helped shape the way that Howe viewed the use of x-rays; he recognized the limitations of radiography and its role as an integrated part of patient assessment procedures:

> ... I feel far more can be learned regarding vertebral and postural relationships through clinical observation, palpation--especially motion and/or muscle palpation, muscle testing, orthopedic and neurological testing than can be found through spinography (27).

Because of his expertise, Howe was included in the Houston Conference on Spinal Manipulation in 1972. In fact, he was influential in creating the definitions that helped allow chiropractors to be reimbursed by Medicare. Getting approval for reimbursement was a very difficult task indeed, because the wording of the legislation had been altered during the debate process. "See, the problem is when you have lobbyists trying to get something across and Congress takes it and turns it into something else; it comes out a camel instead of a horse" (28). The result was that chiropractors had to demonstrate evidence of manipulable lesions (subluxations) on an x-ray film in order to be paid for their services by the government. However, there was no consensus on what a manipulable lesion was until the Houston conference. Then, Howe (1974) undertook some research and produced the paper "The Role of X-Ray Findings in Structural Diagnosis," which also aided in achieving the goal of allowing chiropractors to be reimbursed for manipulation, but, due to the vagaries of the legislative process in America, not for the cost of the x-ray mandated to demonstrate the lesion (29).

Howe railed against this, not just for financial reasons, but for reasons of patient safety:

> To demand that there be radiological evidence of vertebral subluxation in order to justify chiropractic treatment is irresponsible. It is totally contradictory to proper radiological health procedure which demands a clinical reason for any application of ionizing radiation to a human being (30).

Despite these and many other vigorous protests, though, this policy of the United States government still exists today.

The ADRC offered a wide array of services. According to an advertisement in the *Journal of Clinical Chiropractic*, they included:

> Unparalleled radiographic diagnosis by certified chiropractic roentgenologists, comprehensive physical examinations, clinical and laboratory diagnosis, electrocardiography interpretation (electronic telemetry from your office to the center), bracing and casting service, x-ray film reading service, consultation and help in problem cases, orthopedic and neurological examinations, increased documentation and expert testimony in personal injury cases, continuing programs of postgraduate education, seminars and convention programs and professional courtesy discounts for examination of doctors and their families (31).

The Center was so well-equipped that the 1969 annual workshop for the American College of Chiropractic Roentgenologists was held there in November. Facilities also included television monitors for the fluoroscopic equipment, so that group tutorials could be held, a library, and what is described as a "spacious" auditorium stocked with audiovisual gear (32).

Perhaps it was just ahead of its time or perhaps the chiropractic community did not feel it needed assistance with diagnosis, because despite the research, education and other services it was providing, the ADRC could not support itself financially. "By 1972, I was working for free, and you can't do that for very long with six kids" (33).

For ten years Joe Janse had been offering Howe a position at NCC, and this seemed an opportune time to finally accede to Janse's requests. In September 1972, Howe moved his family again, but not without some trepidation. "When J.J. [Janse] made me the offer, it

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wasn't... it wasn't very good, but it was better than not eating" (34). Howe was installed as chair of the radiology department in the place of James Winterstein, D.C., who was moving out of state to practice full-time, but would later return to become president of the college.

At NCC, which had moved to the Chicago suburb of Lombard, Illinois, Howe helped to redesign the radiology curriculum, based on a newly developed model:

> The University of California at San Francisco, with grant support from the Bureau of Radiological Health, U.S. Department of Health, has developed a new and practical system for teaching the radiological sciences. The system will be in operation at National College in the fall of 1973. The American Chiropractic Association (ACA), through its Radiological Consulting Committee and Council on Roentgenology, investigated the system and found it to be very applicable to chiropractic needs in the teaching of diagnostic roentgenology. through the cooperation of the University of California and the Bureau of Radiological Health, ACA has arranged for delivery of the system to National College as the first chiropractic institution to implement its use (35).

Shortly after his arrival, the physical facility of the radiology lab was redesigned also to include six study carrels, a workroom, and a twenty-four-foot classroom, in addition to storage and darkroom areas (36).

Howe also helped to implement the postgraduate residency program on the NCC campus. The original idea of a radiology residency was conceived by Winterstein, but "...it was Joe [Howe] that really structured the program, structured the concept of a residency program at full-time, on-campus experience" (37).

In 1976, Howe was promoted to chairman of the clinical sciences division. However, he was not meant to be an administrator, "I was not liking the job I had there. I had foolishly taken on [the position]" (38). But he enjoyed teaching, so he explored possibilities at other colleges. "LACC made the best offer. So I came here for that reason, and also at the time the president of the college was Heath Quigley. He was one of my instructors at school, and we were long-time friends. I think, probably more than anything else, I came because of Nip. Nip was his nickname" (39).

In 1978, Howe took the position of chair of the radiology department at LACC. Coming from what was arguably the best chiropractic radiology department at the time, he was disappointed at what he found when he arrived out west. There were only three courses given, one in radiographic anatomy, one in physics and technology and one for everything else including all pathology. There were virtually no slides to teach from, no machines to demonstrate on, and no films for the students to look at. Howe described it in his typical unvarnished way, "It was a total disaster... As quickly as I could, I changed the whole curriculum" (40).

He worked a great deal with Sharon Jaeger, D.C., a student from NCC who had came with Howe to finish her residency and Mike Barozy, D.C., the clinic director to create a teaching file of radiographs. "When I got there, there was a stack of films, just plain films, no jackets, no anything, back in a corner of the clinic. That was the study film; nobody ever bothered with it. There were a few carousels of slides, mostly from a micro-x-ray recorder, which were obsolete. And they had a partial ACR (American College of Radiology) file, but it was in a locked file in a back room of the clinic, and it was supposedly available, but nobody ever used it" ([41], [42]).

Fortunately, Howe had brought eighty-five carousels of his personal slides with him from NCC, and they were immediately employed for lectures. Working with a student who was an x-ray technician, he obtained an old radiographic unit and placed it in a partially-enclosed building on LACC's Glendale campus. It would not take x-rays, but sufficed for students to practice patient positioning.

In addition, the x-ray equipment used in the clinic was antiquated. The younger of the two units was twenty-three years old, and the other, which was used most frequently for patients, was considerably older than that. After an inspection, Howe concluded that it was unsafe and dealt with the problem in a characteristically direct way, "I brought everybody who was involved with it [the equipment], went out to a hardware store and bought a padlock. Then I came back, turned off the electrical panel going to it, padlocked it, led them to the bathroom, dropped the keys in the toilet and flushed it. Well, you can imagine the expressions [on their faces], but that machine was never used again" (43).

The machine was replaced by a large, three-phase fluoroscopic unit. This unit was fitted into a room that had a large walled-off area of protection for the control panel. In the wall was a window four feet tall and six feet wide so students could watch the procedure safely. After the installation, a radiation physicist was called out for a safety inspection. He took readings which clearly

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showed that the window was made not of leaded glass, an accepted barrier to x-rays, but plain plate glass which offered little protection from the scatter radiation. It was quickly replaced (44).

Howe was incredulous that LACC was even accredited by the Council on Chiropractic Education and speculated that it was partially due to George Haynes, who had been so instrumental in starting the accrediting agency, was from LACC. "I think they must have overlooked a lot of things" (45).

However, Howe credited the administration at that time for its willingness to accept suggestions about curriculum and even spend some money in order to work toward improvement (46).

A residency of sorts did exist when Howe arrived, but it was not very strong. Phil Runsten, D.C., trained by Nilsson Santos, D.C., was the department chair before Howe, but was only on campus two or three days per week. There was only one resident, and, "He had no one to teach him... and he dropped out almost as soon as I got there" (47).

The new era of residency at LACC began with Sharon Jaeger D.C., Victor Tong, D.C., Dennis Spurgin, D.C., and George King, D.C.

A radiology learning lab was set up in the auditorium of the main building in Glendale, and students who showed aptitude were made assistants. They included Cindy Baum, D.C., who would later become chair of the department for a brief time, and Gary Lindquist, D.C. They were both interested in the residency, so Howe convinced the administration to accept both at the same time. He now views accepting two at once as a mistake, because inexperienced residents drain the resources of the department. But since then LACC has opened two places per year for new residents, creating the largest residency in chiropractic, with up to six residents in the program at a time.

Under Howe's direction, the residency at LACC was tough, but provided great opportunities for learning. According to Gary Schultz, D.C., who chaired the radiology department from 1990 until he was promoted to lead the clinical sciences division in 1997:

> Joe always relied on the sinew of his people rather than the structure of a program. He established himself as a resource for information and as a first year resident, he could teach us a great deal. But Joe always maintained that by your second year, you should be knowing things that he doesn't remember and he should really be the person pointing you at resources. Pointing you towards books and journals and you should be teaching Joe at that point. That was pretty much his approach to it.
>
> Schedules were kept deliberately loose. Joe expected you to be there anywhere between the hours of 6 a.m. and 10 p.m. on any day. And he especially expected you to be there when he wasn't there. And he made that very clear from day one. If you wanted to be in that program, your success would be largely self-modulated.
>
> And being available at all hours means that you had the opportunity to learn from the department at all hours. So the more you were there, the more you thought, the more you contributed, the more you'd get. That was his design of the program. And it worked. I put in many weeks 80, sometimes ... up to 90 hours a week in the department working. And you learned a lot.
>
> There were a number of people there always and Joe made sure when he accepted people that there was a sufficient diversity. He didn't like to have two people thinking exactly the same [way] in the department. He always liked to have that variety of perspective, that variety of thought processes. And as a resident, you learned a lot from the other residents, and he made sure, if you were interested, that you were going to have access to those other people and that they were going to be able to [help you achieve] a higher level of understanding (48).

Some of those "other people" also included a few of the most eminent radiologists in the medical community. Because of these alliances forged by Howe, the residents at LACC have been able to study with Deborah Forrester, M.D., from the University of Southern California School of Medicine; William Glenn, M.D., pioneer in multiplanar imaging (Magnetic Resonance and Computed Tomography); Stephen Rothman, M.D., a highly respected neuroradiologist, and Donald Resnick, M.D., author of the six-volume text that is widely regarded as the standard source on bone and joint disorders. (Figure 7)

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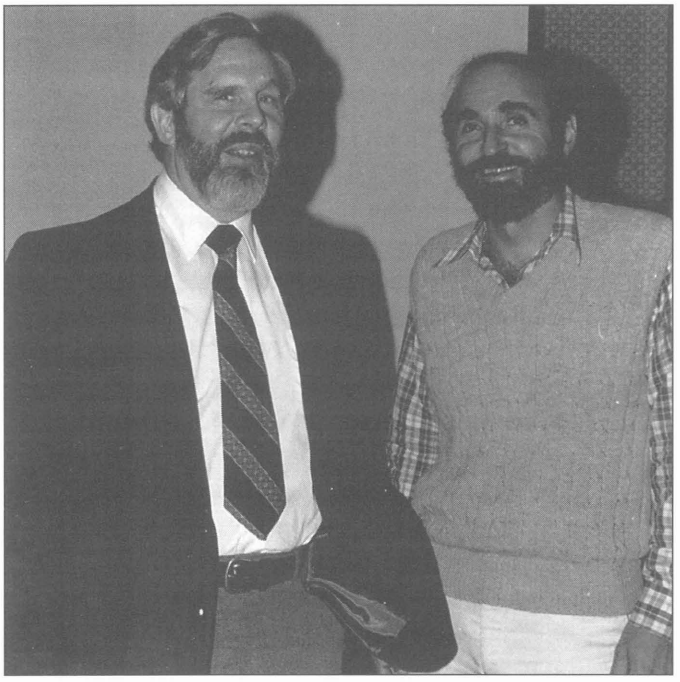

Figure 7. Joseph Howe, D.C. and Donald Resnick, M.D. (Courtesy Joseph W. Howe).

Howe and Sharon Jaeger invited Resnick and Rothman to speak at an ACCR conference in San Diego in 1982, an annual gathering for workshops and symposia ([49], [50], [51], [52], [53], [54], [55]). Howe had met with a great deal of resistance from medical doctors throughout his career, but both Resnick and Rothman were concerned only with the education of radiologists, whether medical or chiropractic, and agreed to speak. This helped strengthen the bond between them and LACC, as well as between the chiropractic and medical communities at large.

The relationships initiated by Howe still stand. In fact, senior radiology residents at LACC spend one day per week at the San Diego Veterans Administration Hospital with Resnick, and several days per month with Rothman at a teaching hospital.

Howe always strove to assure that his students received the best possible education. About the LACC program, Ronald Beideman stated, "One of the most broadly educated chiropractic radiologists, [Howe] spent... ten years developing LACC's radiology program. As might be expected from this genuine pioneer of chiropractic radiology, LACC's program soon began to rival the one he developed at National" (56).

Residents at LACC were also afforded other opportunities to interact with working radiologists due to Howe's efforts. He made sure that the residents were able to attend both the ACCR and the annual meeting of the Radiological Society of North America (RSNA), one of the premiere gatherings of imaging specialists in the world. Howe, with his total lack of pretensions, would even share space in his hotel room with residents. "Joe always made a place for them. It didn't bother him... especially for RSNA... because... that was an educational experience that no radiology resident should be spared" (57). (Figure 8)

Howe also worked to educate practicing chiropractors. He held weekly sessions with the clinicians at the college, a sort of radiology rounds of the most interesting cases that had come through the clinic. In addition, whenever he received a poor-quality set of x-rays to read from a doctor in the field, he would first generate a report of findings, then he would write a letter explaining how the doctor could improve his radiographic technique. The forthright terms in which he stated this earned those letters the playful nickname of "nastygrams" (58). And his chastisement was not without humor. One time, upon receiving a particularly bad set of x-rays, Howe is said to have called the referring doctor to tell him that he thought there *might* have been a person between the x-ray tube and the films. Other notable phrases include, "What a complete waste of radiation," and the superlative, "I have *never* seen x-rays as bad as this; he should be horsewhipped" (59)! But Howe was not intentionally derisive; he was simply passionate about his profession and sometimes let his irritation show when he saw examples of what he considered unprofessional behavior. He always strove for excellence and expected the other doctors in his field to work to the best of their ability also.

James Winterstein has said, "One was never in doubt about the position of Dr. Joseph Howe. Indeed, one of his strengths is his ability to state his position clearly and, one might even say, forcefully" (60). Alan Adams, Vice-President of Professional Affairs at LACC described Howe in the following way:

> I have always found Dr. Howe not only a cutting edge but somebody who seemed to be able to succinctly get to the essence of an issue, and without mincing words, be able to put his fingers on what the issues were. And his comments on chiropractic education I think were right on target in terms of where the profession was at various stages of its development (61).

As at NCC, Howe was also involved with the larger administrative issues of the college; after a time, it again began to detract from his main focus. According to Schultz:

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Figure 8.
1992 ACCR Workshop, Irving, TX: Reed Phillips D.C.; Larry Pyzik, D.C.; John Danz, D.C.; Joseph Howe, D.C.; Ray Conley, D.C;, Andrew Jackson, D.C.; Terry Yochum, D.C. (Courtesy Joseph W. Howe).

> Joe was very deeply involved with the college, service to the college, various committees and various administrative dealings of the institution. Joe was kind of a lynch-pin kind of a person and Maylon Drake, the president, depended heavily on Joe to provide the wisdom of experience and time in the trenches...
> It began to pull more from him. Joe's frustration level rose a great deal. A great deal more was expected from [him]. Too much administration, not enough radiology. And Joe never made any bones about his disdain for purely administrative matters. He never hid that dislike. And it finally burned him out. This was in 1988. It was dragging on his time; he couldn't do his radiology practice the way he wanted to. And the institution was dragging very hard on him... (62).

So he ultimately left the school for a few months to regain his perspective. When he came back, it was part-time, purely teaching radiology to the residents.

Howe was also influential in shaping the constitution of the LACC faculty. Adams cites Howe's presence as one of the reasons he moved to LACC. "Dr. Howe was, in many ways, an intellectual anchor for me... he was one of the islands of intellectual discourse at that time" (63). Reed Phillips, D.C., Ph.D., president of LACC, and, as mentioned previously, Sharon Jaeger, D.C., who later sat on LACC's board of Regents, were also influenced to go to the college because Howe was there. Their admiration is obvious. Phillips has said, "Dr. Howe encouraged independent study, research, and critical thinking, creating a foundation in my life which has served me well. By example, I learned the importance of hard work, diligent study, and a commitment to excellence." Jaeger reminds us that Howe's sometimes gruff exterior is only a thin crust, "His enthusiasm for the study of radiology is contagious and he is always willing to lend a helping hand and a warm smile -- whether it pertains to the subject of work or matters of the heart" (64).

Throughout his career, Howe continued to stress the vital need for research and showed little tolerance for theosophical arguments and appeals to the authority of the founding Palmers:

> Because of dogmatism, isolation of the profession from the rest of the healing arts and from science in general, lack of finances to support investigation, diversion of money and effort from such

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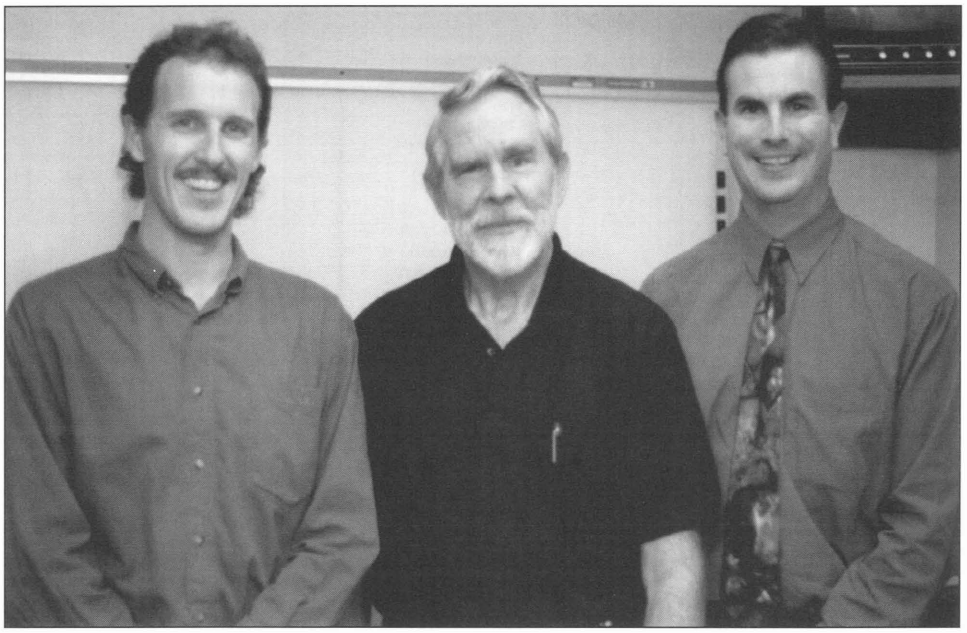

Figure 9.
Three generations of LACC radiology department chairmen: Jeffrey Cooley, D.C.; Joseph Howe, D.C.; Gary Schultz, D.C. (photo by the author, 1998).

> investigation into the necessity to struggle for survival against the strong opposition of organized medicine and its efforts to destroy chiropractic, and other reasons, research into the basis of chiropractic has been limited. This has led to overstatement, misstatement, sometimes oversimplification, and often over-elaborate rhetoric relating to chiropractic itself and the subluxation theory... The basis of chiropractic is manipulative therapy, not subluxation (65).

Howe has always been a *chiropractor*, emphasizing that patient needs are the priority, and doctors of chiropractic must always remember this in order to perform their duties correctly. In addition, he could always see how chiropractic fit into the spectrum of health care:

> Research must delve into all possible mechanisms by which manipulation may produce results. Chiropractic physicians must be trained to broadly diagnose human ailments--or at least be diagnostically competent to recognize those disease processes they should refer for alternate or concurrent therapy. There should be no limits set on the scope of their practice as relates to diagnosis. Further, their full integration into the health care delivery system as therapists who may be complementary to as well as alternative to orthodox medical and surgical care should be a priority. The separatism of chiropractic from the rest of healing arts has not served chiropractic, other healing arts, or the public well (66).

For more than forty-five years, Joseph William Howe has been a progressive force in chiropractic and has been officially recognized for his achievements, most notably by being elected a Fellow of the International College of Chiropractors and of the American Chiropractic College of Radiologists. Though he may have retired from private practice, he will continue to train residents, attend conferences, and work for the improvement of the profession. (Figure 9)

ACKNOWLEDGMENTS

The author wishes to thank Glenda Davis for transcribing miles of audio tape.

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Appendix 1: Publications in Journals by Joseph W. Howe

Joseph W. Howe, "X-ray Reports--Their Contents and Importance," *Journal of the National Chiropractic Association*, 1963, 33(10):37-38.

Joseph W. Howe, "The Air Bronchogram--An Indication of Chest Pathology," *The ACA Journal of Chiropractic*, 1964, 1(6):23,52.

Joseph W. Howe, "Frequently Missed Fractures -- Roentgenological Brief," Council on Roentgenology, American Chiropractic Association, 1967, 4(10).

Joseph W. Howe, J.I. Levine, "Observations from State Surveys of Chiropractic X-ray," *The ACA Journal of Chiropractic*, 1969, 6(9):48-53.

Joseph W. Howe, "X-Ray Quiz," monthly column in *The ACA Journal of Chiropractic*, 1969 & 1970 (24 issues).

Joseph W. Howe, "Reduction of Patient Radiation Exposure Through Higher Kilovoltage-Lower Milliamperage Technique," *The ACA Journal of Chiropractic* Supplement, 1970, 7(9):S70-S72.

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Joseph W. Howe, R. Leverone, J. Winterstein, "Guidelines for Radiographic Equipment and Procedure," *The ACA Journal of Chiropractic* Supplement, 1975, 9(7)S:81-S87.

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Appendix 1: Publications in Journals by Joseph W. Howe

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Joseph W. Howe, Y.W. Tong, "Osteochondritis Dessicans - Radiology Corner," *The ACA Journal of Chiropractic*, 1981, 18(6):68-71.

Joseph W. Howe, D.E. Spurgin, "Congenital Hip Dysplasia with Bilateral Dislocation- Radiology Corner," *The ACA Journal of Chiropractic*, 1981, 18(10):54-56.

Joseph W. Howe, Y.W. Tong, "Synovial Osteochondrometaplasia - Radiology Corner," *The ACA Journal of Chiropractic*, 1981, 18(11):54-57.

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Joseph W. Howe, T.R. Yochum, "X-Ray, Pregnancy and Therapeutic Abortion: A Current Perspective," *Journal of the American Chiropractic Association*, 1985, 22(4):76-80.

Joseph W. Howe, A.L. Manne, "Intra-osseous Ganglion of the Lunate (A Case Study) -Roentgenological Brief," Council on Roentgenology, American Chiropractic Association, 1985.

Joseph W. Howe, G.L. Bustin, "CPPD - The Impersonator of Osteoarthritis-Roentgenological Brief," Council on Roentgenology, American Chiropractic Association, 1985.

Joseph W. Howe, R. Krauss, "Prostatic Carcinoma Metastatic to Bone," *Journal of the American Chiropractic Association,* 1986, 23(2):61, 62.

Joseph W. Howe, "Chiropractic Radiology 1987- An Overview." *California Chiropractic Journal*, 1987, 12(4):17,19,32.

Joseph W. Howe, T.R. Yochum, S. Baumgard, M. Sladich, "Case Report 449, Part I, Chondroblastoma of the Cervical Spine," *Skeletal Radiology*, 1987, 16:604-5.

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Joseph W. Howe., "X-Ray Monitoring: The ALARA Program," *Today's Chiropractic*, 1988, 17(3):89-93.

Joseph W. Howe, "Caution Must be Exercised in Use of Videofluoroscopy - Viewpoint," *Journal of the American Chiropractic Association*, 1989, 26(6):38-41.

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Appendix 2: Publications: Contributions to Books

J.W. Howe, J.F. Winterstein, "The Radiographic Manifestations of Subluxations," in *Basic Chiropractic Procedural Manual*, (American Chiropractic Association, 1st Ed. 1973, now in 6th Ed.).

J.W. Howe, J.F. Winterstein, "Case Presentations," in *Basic Chiropractic Procedural Manual*, (American Chiropractic Association, 1st Ed. 1973, now in 6th Ed.)

J.W. Howe, "The Role of X-Ray in Structural Diagnosis," *The Research Status of Spinal Manipulative Therapy*, NINCDS-NIH Monograph # 15, U.S. Department of Health, Education and Welfare 1975.

J.W. Howe, "A Radiological Approach to Spinal Evaluation," in *Proceedings of the Haldeman Interprofessional Conference on the Spine*, (1981.)

J.W. Howe, "Diagnostic Imaging in Spinal Stenosis and Degenerative Disc Disease," in Yochum, T. R. and Rowe, L. J.: *Essentials of Skeletal Radiology*, (Williams & Wilkins, 1987.)

J.W. Howe, "Radiographic Diagnosis of Upper Cervical Check Ligament Injury," in Jaeger, S. A. and Pate, D.: *Radiological Case Studies*, (Raven Press, 1990.)

J.W. Howe, "Radiology Review" in Shanks, L.: *Chiropractic Board Review*, (Appleton Century Crofts, 1991.)

J.W. Howe, S.M. Foreman, W.V. Glenn, Jr., "Advanced Imaging in Chiropractic," in Haldeman, S: *Principles and Practice of Chiropractic*, 2nd Ed. (Appleton Century Crofts, 1992.)

J.W. Howe, "Imaging the Low Back" in Logan, A. L.: *The Low Back and Pelvis*, (Aspen Publishers, 1996.)

PUBLICATIONS: BOOK

J.W. Howe, R.S. Stowe, *Basic X-Ray Physics and Principles of Radiation Protection*, (Lombard, Illinois: National College of Chiropractic, 1975.)

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Appendix 3: Howe's Educational Television Tape Presentations

J.W. Howe, "Radiological Manifestations of Spinal Subluxations," American Chiropractic Association, 1973.

J.W. Howe, "Case Presentations Illustrating Radiological Manifestations of Spinal Subluxations," American Chiropractic Association, 1973.

J.W. Howe, "Roentgen Signs of Bone Disease," TV Continuing Education Programs (parts 1 & 2), New York Chiropractic College, 1982.

J.W. Howe, "Differential Diagnosis of Malignant and Inflammatory Conditions," TV Continuing Education Programs, New York Chiropractic College, 1982.

J.W. Howe, "Approach to Spinal Film Analysis," TV Continuing Education Programs, New York Chiropractic College, 1982.

J.W. Howe, "Significant Anomalies of the Cervical Spine," TV Continuing Education Programs, New York Chiropractic College, 1982.

J.W. Howe, Collection of Interesting X-rays, TV Continuing Education Programs, New York Chiropractic College, 1982.

J.W. Howe, Cineradiographic Studies of the Cervical Spine, TV Continuing Education Programs, New York Chiropractic College, 1982.

J.W. Howe, A.L. Logan, "Evaluation of Upper Extremity Problems" (9 hour comprehensive program), L & M Enterprises, 1982.

J.W. Howe, "Radiographic Positioning for the Upper Extremity," L&M Enterprises, 1982.

J.W. Howe, "An Approach to the Radiographic Interpretation of Lumbo-Pelvic Biomechanics," L&M Enterprises, 1983.

J.W. Howe, "Radiographic Positioning - Routine Spinal and Extremity Views," Departmental Teaching Tape, Los Angeles College of Chiropractic, 1984.

J.W. Howe, T.R. Yochum, W.E. Litterer, G. Guebert, R.B. Phillips, R. Erhart, "Chiropractic Imaging Roundtable," DuPont, 1987.

J.W. Howe, T.R. Yochum, G. Guebert, "100 kHz High Frequency Radiography", Bennett X-Ray Corporation, 1990.

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Appendix 4: Invited Papers

American Chiropractic College of Radiology, Annual Workshop, Leo E. Wunsch Honorary Lecture, Knoxville, Tennessee: "Functional Radiography in Chiropractic Practice, History and Current Status," 1987.

American Chiropractic College of Radiology, Annual Workshop, Leo E. Wunsch Honorary Lecture, Chicago, Illinois: "Computer Applications in Radiological Practice."

Canadian Chiropractic Association, Research Conference, Vancouver, British Columbia, 1975: "Radiological Aspects of Investigations of Spinal Biomechanics," 1989.

Council on Roentgenology of the American Chiropractic Association, Waldo G. Poehner Memorial Lecture, Cleveland, Ohio: "Facts, Fallacies, Myths and Misconceptions in Spinography," 1970.

Haldeman Interprofessional Conference on the Spine, Los Angeles, California: "A Radiologic Approach to Spinal Evaluation," 1981.

National Institutes of Health, National Institute of Neurological Diseases and Stroke, Conference on the Research Status of Spinal Manipulative Therapy, Bethesda, Maryland: "The Role of X-Ray in Structural Diagnosis," 1974.

National College of Chiropractic, Conference on Current Chiropractic Concepts, Lombard, Illinois: "A Contemporary Perspective on Chiropractic and the Concept of Subluxation," 1975.

New York Chiropractic College, Symposium on the Cervical Spine, New York, New York: "Integration of Imaging Techniques," 1989. (with W. V. Glenn, Jr., M.D.)

New York Chiropractic College, Symposium on the Lumbar Spine, Meadowlands, New Jersey: "The Forgotten Facets," 1990.

Appendix 5: Professional Appointments

American National Standards Institute: Member N-44 Committee (set standards for use of radiation in the United States), 1969-1978.

Personal Monitoring Technologies, Inc.: Co-Chairman of the Chiropractic Scientific Advisory Board, 1987.

United States Department of Health, Education and Welfare: Participated in research with the Bureau of Radiological Health relating to dosimetry for x-ray procedures used in chiropractic, 1968-1969 (paper resulted).

United States Department of Health, Education and Welfare: Liaison between the Chiropractic Profession and Bureau of Radiological Health, 1968-1978.

United States Department of Health, Education and Welfare: Project Director for contract # 233-74-6207 BRH-USDBEW, Study to Determine the Optimum Values for the Examinations Related to the Nationwide Evaluation of X-Ray Trends Survey System, 1974-1976.

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Appendix 6: Academics Committees

Los Angeles College of Chiropractic

Accreditation Task Force 11 (Curriculum, Library)
Chairman 1980-84

Chiro Collegium 1982-present

Committee on Instructional Programs 1980-1987
Chairman 1982-1987

Faculty Senate 1979-1987
Vice-President 1979-1980
President 1980-1982

Professional Personnel Committee 1980-1987
Chairman 1983-1987

Speakers Bureau 1985-1986

National College of Chiropractic

Committee on Credentials, Grades, and Records 1974-1978

Curriculum Committee 1972-1978

Executive Council 1976-1978

Faculty Association 1972-1978
President 1975-1976

Search Committee, Academic Dean 1973

Appendix 7: Honors

American Chiropractic Association: Meritorious Service Award, 1978.

American Chiropractic College of Radiology: Fellow, 1991.

American Chiropractic College of Roentgenology: Distinguished Service Award, 1976.

Council on Diagnostic Imaging of the American Chiropractic Association: Honored Life Member, 1993.

Eastman Kodak Company and the Post-Graduate Division of the Los Angeles College of Chiropractic: Sponsors of the Howe-Yochum Fellowship in Diagnostic Imaging, 1991-present.

International College of Chiropractors: Fellow, 1982.

Journal of Clinical Chiropractic: Dedication of a Special Issue, Vol. 3, No. 2, 1980.

Los Angeles College of Chiropractic: Outstanding Service Award, 1979.

National College of Chiropractic: Clyde Martin Award to the Outstanding Faculty Member, 1974.

Ohio State Chiropractic Association: Chiropractor of the Year, 1969.

Who's Who in Chiropractic, 1968.

Who's Who in California, 1988.

Who's Who in Science and Engineering, 1991.

Who's Who in the West, 1992.

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Appendix 8: Professional Associations

American Chiropractic Association (Charter Member)
Radiological Health Consultant 1968-1978.
Task Force on Medicare Guidelines 1972-1973.
Radiological Health Advisory Committee 1985-1990.
Member, 1960-present.

American Chiropractic College of Radiology
President, 1966-1967.
Member, 1962-present.
Member, American Chiropractic Board of Roentgenology 1968-1971.

American Public Health Association
Member Section Council on Radiological Health 1976-1978.
Member, 1969-1979, 1985-1994.

California Chiropractic Association
Chairman Radiation Control Committee 1980-1987.
Member, 1978-present.

Council on Diagnostic Imaging, American Chiropractic Association
Vice President 1965-1966.
President 1966-1968, 1994-1995.
Member, 1957-present.

Health Physics Society
Member, 1969-1976, Midwest Chapter, 1976-1979.

Illinois Chiropractic Society 1972-1978.
Radiological Health Consultant 1972-1978 .

New York Academy of Sciences
Member, 1985-1991.

Pennsylvania Chiropractic Society
President, District 5 1956-1958.
Chairman X-Ray Committee 1962-1968.
Member, 1952-1958, 1962-1968.

Pennsylvania Licensed Chiropractors Association
President 1960-1961.
Vice President 1959-1960.
Member, 1958-1962.

Ohio State Chiropractic Association
Radiological Health Consultant 1968-1972.

Ohio Chiropractic Roentgenological Association
Member, 1968-1972.

Society for Medical Decision Making, Member, 1985-1987.

Appendix 9: Special Discussion Panels

American Chiropractic College of Roentgenology, Annual Workshop, Moderator: Diagnostic Film Reading Panel, San Diego, CA, November 1982.

American Chiropractic College of Roentgenology, Annual Workshop, Member: Diagnostic Film Reading Panel, Atlanta, GA, November 1983.

DuPont Chiropractic Imaging Roundtable, Panel Member: Denver, CO, September 1986.

Los Angeles College of Chiropractic, Educational Sessions of the Homecoming Program, Moderator: Discussion Panel of Presenters, October 1984.

Simi Valley Scoliosis Association, Simi Valley Adventist Hospital, Panel Member: Viewpoints on Scoliosis, Simi Valley, CA, May 1984.

Southern California School of Medicine, Panel Member: Alternate Health Care Systems, Los Angeles, CA, July 1984 and June 1985.

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2. John Taylor, Terry R. Yochum, "Joseph W. Howe: A Pioneer in the Evolution of Chiropractic Radiology," *Chiropractic History*, 1993, 13(1):35-41.

3. Joseph Howe, interview with author, 27 January 1998.

4. Taylor and Yochum, "Joseph W. Howe," (n.2).

5. Howe, interview , January 1998, (n.3).

6. Joseph Howe interview with author 10 March 1998.

7. Joseph Howe, curriculum vita, 1998.

8. Taylor and Yochum, "Joseph W. Howe," (n.2).

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10. _____, interview, October 1997, (n.9).

11. Joseph Janse, "National College To Sponsor Graduate Course in Radiology," *Journal of the National Chiropractic Association*, 1957, 27(12):23,71.

12. Howe, interview, October 1997, (n.9).

13. Donald Hariman, "Report --American Board of Chiropractic Roentgenologists," *The ACA Journal of Chiropractic*, 1972, 9(11):28-29.

14. Todd Knudsen, electronic mail to author 29 January 1998.

15. Joseph Howe, interview with author, 20 January 1998.

16. _____, interview, 20 January 1998 (n.15).

17. Donald Hariman, "ACBR Annual Report to the Profession" *The ACA Journal of Chiropractic*, 1977, 14(11):21-22.

18. Joseph Howe, "ACCR Report," *The ACA Journal of Chiropractic,* 1968, 5(5):23-24.

19. _____, interview, 27 January 1998, (n.3).

20. _____, interview, 20 January 1998, (n.15).

21. Reed Phillips, interview with author, 27 January 1998.

22. Joseph Howe, "Preliminary Observations from Cineroentgenological Studies of the Spinal Column," *The ACA Journal of Chiropractic*, 1970, 7(10):565-70.

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